Panasonic

5.25inch Minifloppy Disk Drive

JU-455 JU-475

MAR | 4 1991



SPECIFICATION SUMMARY

Performance Specifications

| Item | | | | JU-455 | JU-475 (Low) (High) | |
|----------------------|--------------------------------|---|-----------|----------------|------------------------|---|
| Capacity | Total Storage Capacity/Disk | Unformated (Kbytes) | FM MFM | 250 500 | 500 1,000 | 833/ 802 1,667/1,604 |
| | | Formated (Kbytes) ** 16Sector/Track | FM MFM | 164 328 | 328 655 | *15 Sectors/Trac 614/ 591 1,229/1,183 |
| | Storage Capacity/ Track | Unformated (bytes) | FM MFM | 3,125 6,250 | 3,125 6,250 | 5,208 10,416 |
| | | Formated (bytes) **16Sector/Track | FM MFM | 2,048 4,096 | 2,048 4,096 | *15 Sectors/Trac 3,840 7,680 |
| | Storage Capacity/ Sector | Formated (bytes) * 16Sector/Track | FM MFM | 128 256 | 128 256 | 256 512 |
| Recording Density | Number of Heads | | | 2 | 2 | 2 |
| | Number of Tracks | | | 80 | 160 | 160/154 |
| | Recording Density(bpi) | | FM | 2,938 | 2,961 | 4,935/4,821 |
| | | | MFM | 5,876 | 5,922 | 9,870/9,642 |
| | Track Density(tpi) | | | 48 | 96 | 96 |
| | Data Transfer Rate(K bits/s) | | FM | 125 | 125/150 | 250 |
| | | | MFM | 250 | 250/300 | 500 |
| Access | Rotational Speed(R.P.M) | | | 300 | 300 | 360 |
| | Track to Track Seek(ms) | | | 4 | 3 | 3 |
| | Settling Time(ms) | | | 15 | 15 | 15 |
| | Motor Start Time(ms) | | | 500 | 500 | 500 |

Power Specifications

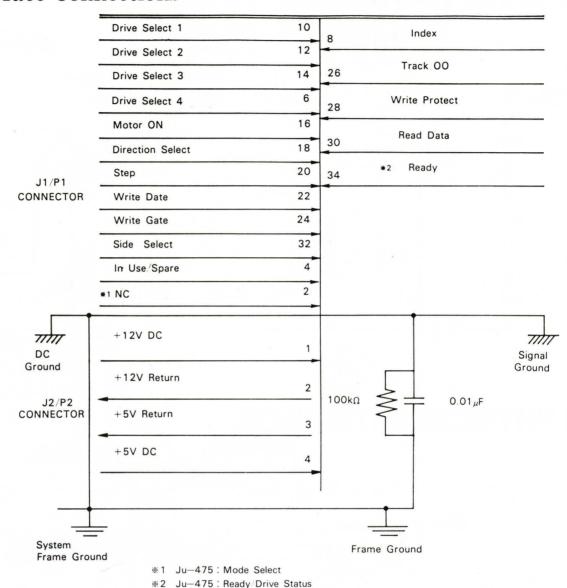
| Item | | | Rating | | |
|--|---------------|--------------------------------------|---|----------------------------------|--|
| Voltage | | 12V ± 10% MaxRipple 100mVp-p 455/475 | | | |
| | 12 VDC | Current | Max. (At moter start) | 0.9A | |
| Power | | | Typical (Read) | 0.17/0.22A | |
| Requirment | 5 VDC | Voltage | $5V \pm 5\%$ MaxRipple 50 mVp-p $455/475$ | | |
| | | Current | Max. (write) | 0.47/0.55A | |
| | | | Typical (Read) | 0.37/0.44A | |
| | Temperature | | Operating | 5 to 46.1°C | |
| | | | Storage | −22.2 to 55 °C | |
| | | | Shipping | −40 to 62.2°C | |
| Environment | | | Temperature Gradient | 20° /H | |
| | Humidity | | Operating | 20 to 80% RH No Condensation | |
| | | | Non Operating | 1 to 95% RH No Condensation | |
| | | | Maximum Wet Bulb | 29.4°C | |
| | Operating | | Acceleration | 0.5G (No Soft Error) | |
| \C\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | | Frequency | 5 to 55 Hz (Except Resonant Poir | |
| Vibration | Non Operating | | Acceleration | 5.0G | |
| | | | Frequency | 5 to 55 Hz (Except Resonant Poir | |
| | Operating | | Acceleration | 0.5G (No Hard Error) | |
| Shock | | | Interval | 10ms (Square Wave) | |
| Snock | Non Operating | | Acceleration | 40G | |
| | | | Interval | 10ms (Square Wave) | |
| Mechanical Dimension (Except Front Bezel) | | | Width | 146mm | |
| | | | Height | 41.5mm | |
| | | | Depth | 202mm | |
| | | | Weight | 1.3kg | |
| Mounting Angle | | | Vertical | 0° to 20° | |
| | | | Horizontal | 0° to 20° | |
| Dielectrical Withstanding Voltage | | | Between the Mounting Bracket and Signal Ground | 250 VDC (1minute) | |
| Insulation Resistance | | | Between the Mounting Bracket and Signal Ground 250 VDC,>50 M | | |

Reliability Specifications

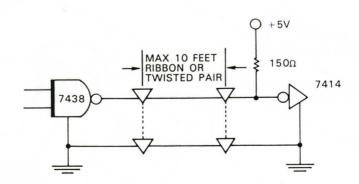
| l de la companya de | Rating | | |
|---|-----------------|------------------------|--|
| | Mtbf | 10,000 POH | |
| Drive | Mttr | 0.5 hours | |
| | Drive Life | 5 years or 10,000 POH | |
| | Software Errors | 10 ⁻⁹ /bit | |
| Error rate | Hardware Errors | 10 ⁻¹² /bit | |
| | Seek Errors | 10 ⁻⁶ /seek | |

ELECTRICAL INTERFACE

Interface Connections



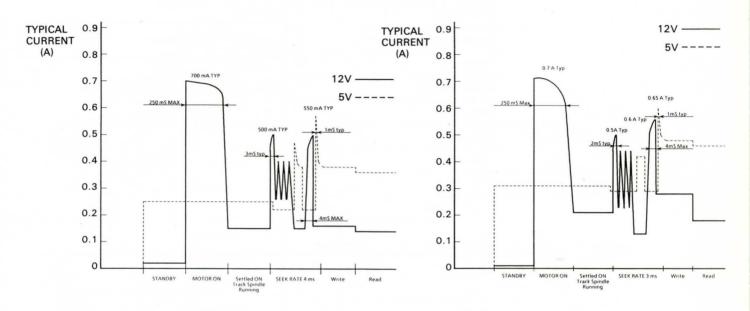
Interface Signal Driver/Receiver



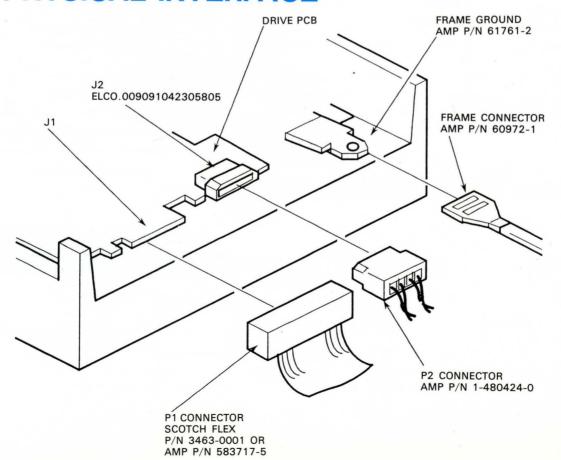
DC POWER PROFILE

JU-455

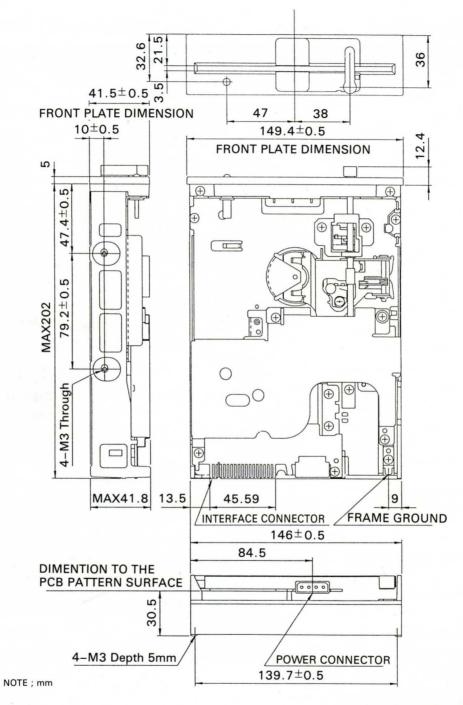
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PHYSICAL INTERFACE



MECHANICAL DIMENSIONS



For further details of each Model, please refer to the specification sheet.

